

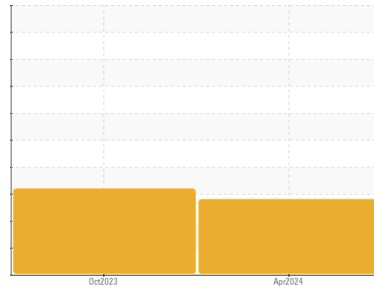


# PROBLEM SUMMARY



Area  
**RONI**  
 Machine Id  
**162**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

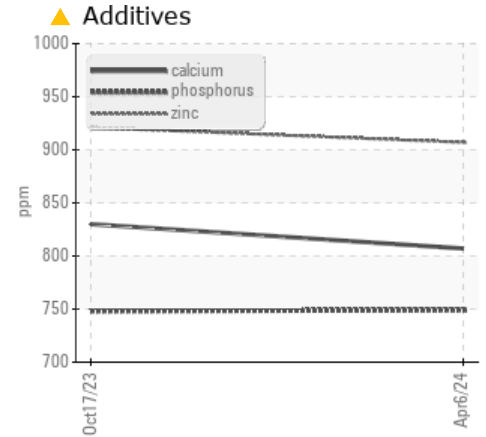
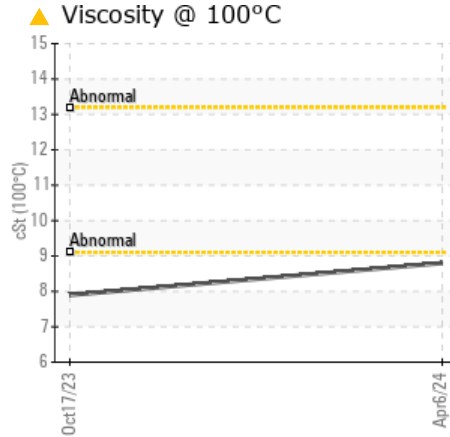
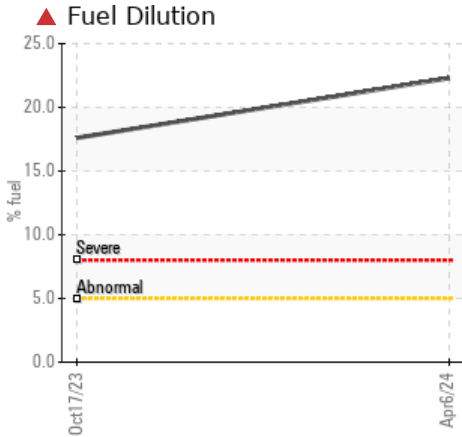
## Sample Rating Trend



FUEL



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check the fuel injection system. The oil is near the end of it's useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	---
Calcium	ppm	ASTM D5185(m)	▲ 807	▲ 830	---
Fuel	%	ASTM D7593* >5	▲ 22.3	▲ 17.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 8.8	▲ 7.9	---

Customer Id: RONVAU  
 Sample No.: WC0920880  
 Lab Number: 02629166  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
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To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	The oil is near the end of it's useful service life, recommend schedule an oil change.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

## HISTORICAL DIAGNOSIS

### 17 Oct 2023 Diag: Wes Davis

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. Visc @ 100°C is severely low. Calcium ppm levels are abnormally low. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

view report



FUEL

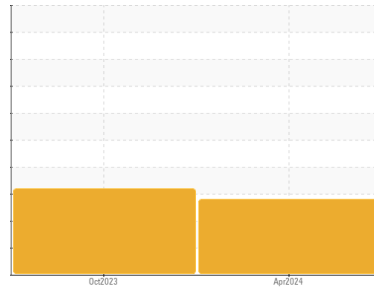




# OIL ANALYSIS REPORT

Area  
**RONI**  
 Machine Id  
**162**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

## Sample Rating Trend



## FUEL



### DIAGNOSIS

#### ▲ Recommendation

We advise that you check the fuel injection system. The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### ▲ Fluid Condition

Calcium ppm levels are abnormally low. Visc @ 100°C is abnormally low. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0920880</b>	LH0275204	---
Sample Date	Client Info			<b>06 Apr 2024</b>	17 Oct 2023	---
Machine Age	hrs	Client Info		<b>0</b>	8255	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	Changed	---
Sample Status				<b>SEVERE</b>	SEVERE	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method			<b>NEG</b>	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>11</b>	14	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	<1	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	<1	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

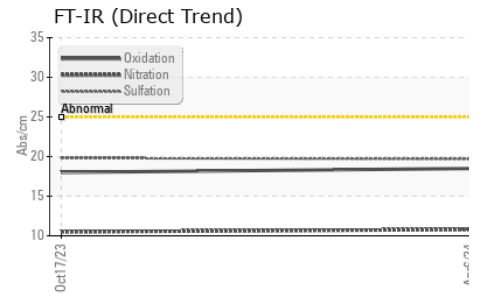
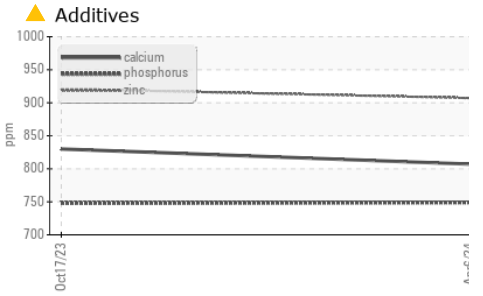
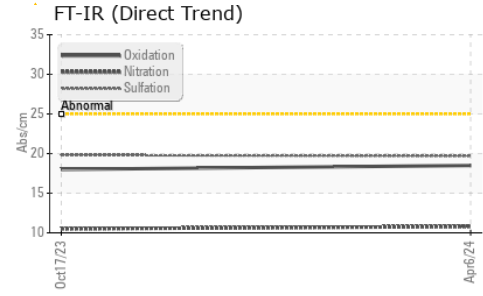
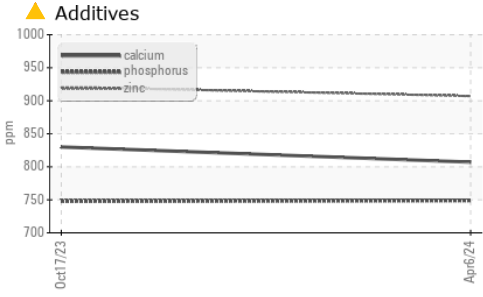
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>5</b>	8	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)		<b>45</b>	46	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>747</b>	742	---
Calcium	ppm	ASTM D5185(m)		<b>▲ 807</b>	<b>▲ 830</b>	---
Phosphorus	ppm	ASTM D5185(m)		<b>749</b>	748	---
Zinc	ppm	ASTM D5185(m)		<b>907</b>	921	---
Sulfur	ppm	ASTM D5185(m)		<b>1918</b>	1894	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	3	---
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Fuel	%	ASTM D7593*	>5	<b>▲ 22.3</b>	<b>▲ 17.6</b>	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.8</b>	10.5	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.7</b>	19.8	---



# OIL ANALYSIS REPORT

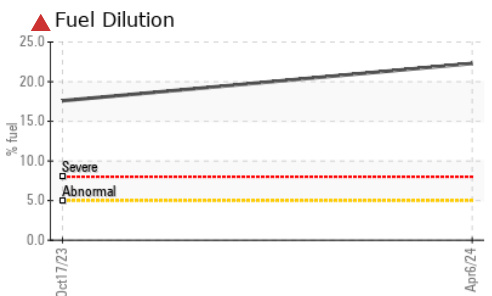
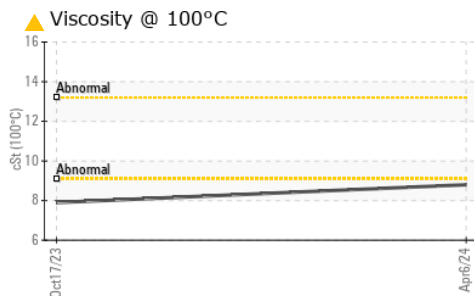
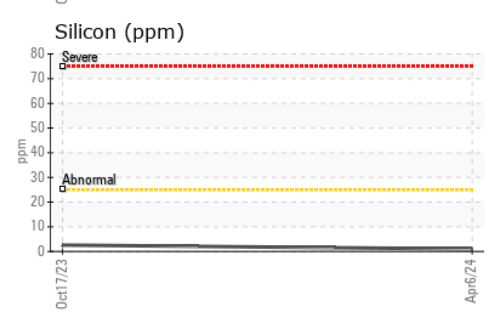
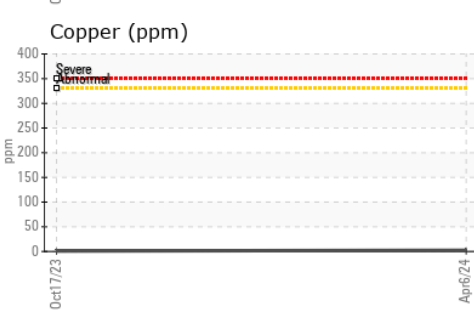
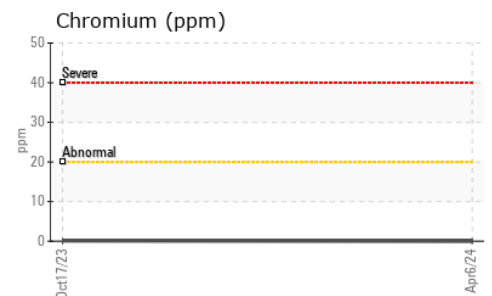
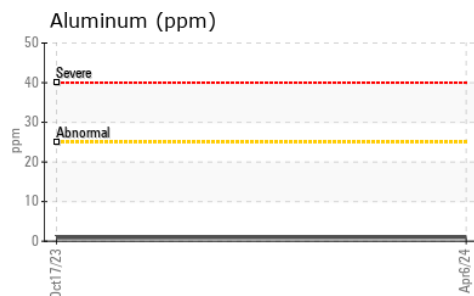
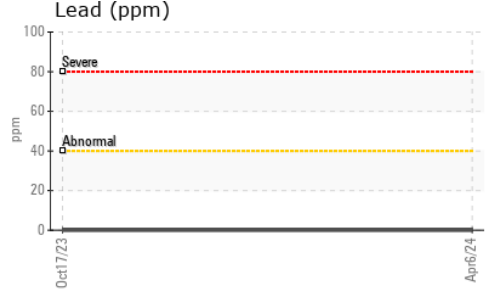
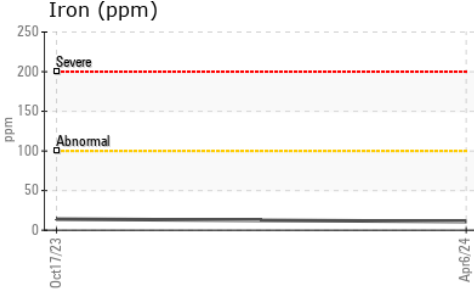


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>18.5</b>	18.0	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
Free Water	scalar	Visual*		<b>NEG</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		<b>8.8</b>	7.9	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920880  
**Lab Number** : 02629166  
**Unique Number** : 5762298  
**Test Package** : MOBCE ( Additional Tests: PercentFuel )

**RONI/IRON SHORE EXCAVATING LTD.**  
 100 MACINTOSH BLVD  
 VAUGHAN, ON  
 CA L4K 4P3  
 Contact: Service Team  
 service.team@roni.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.